

Abstract Submitted  
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**Parity Violation in Strong Interactions** DHEVAN GANGADHARAN, UCLA, STAR COLLABORATION — Recent theoretical findings suggest parity violation of the strong interaction. This may be seen in heavy-ion collisions through the separation of charged particles relative to the reaction plane of the colliding nuclei. Charged particle separation in heavy-ion collisions is by definition P-odd and is theoretically a consequence of a “topological charge” changing transition of the vacuum structure via instantons/sphalerons in the colliding region. Recent experimental results from the STAR detector at RHIC using charged particle correlations will be presented.

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